Wickes



HOW TO FIX CERAMIC WALL & FLOOR TILES

For many years ceramic tiles have been popular as a means of covering wall, floor and work surfaces.

They provide a maintenance free, long lasting, and tough decorative surface finish which cannot be matched by any other form of covering. If they have a drawback it is purely that they are so durable that they cannot be stripped off at will like wallpaper or paint to suit changing decorative tastes.

Although the use of ceramic. and quarry tiles is on the increase, there are still many people who hesitate to tackle a major tiling project,

believing that it is too complicated. This leaflet is aimed to dispel many of the doubts and worries which exist and to make tiling an easier and more enjoyable task.



CHOOSING TILES FOR WALLS

Ceramic wall tiles are made in an enormous variety of colours, designs and sizes. Nobody can choose the colour and design that suits your taste other than you so you will need to spend some time looking at our displays to find the tiles which appeal most.

Keep an eye open for 'combination' tiles. These are tiles with the same background colour with the majority used being plain but with decorated tiles in singles or sets of two or three which are used almost like pictures on a wall being interspaced with the plain tiles. Many of these decorative tiles are handpainted before being glazed and can bring a tiled wall to life.

Look out for tiles which are a colour match for modern sanitaryware. You'll find these available plain or decorated in some way.

If you plan to tile the floor as well, it is important to remember that wall tiles cannot be used on the floor. They are not tough enough.

So choosing colour and design is purely a question of looking at what is available. Wall tile sizes are most commonly 15 x 15cm (6 x 6"), 20 x 20cm (8 x 8"), 20 x 25cm (8 x 10"), 20 x 30cm (8 x 12") and 30 x 40cm (12 x 15^{3} /4").

As a general rule, and assuming it suits your colour scheming, aim for large tiles in a large room and small tiles in a small room. This is partly for aesthetic reasons and partly because in a big room tiling can proceed more quickly when larger tiles are used.

Once you have chosen your tiles you'll need to work out how many you need to purchase. Probably the easiest method is to measure the height of the wall and calculate how many of your chosen tile size will be needed to fit from floor to ceiling..Count a half or part of a tile as whole one. Do the same for the wall width.. Multiply the number required for the height by the number for the width and this will give you the total number for the wall. Repeat the process on the other walls. Make adjustments to allow for doors and windows, and for the inclusion of any decorated tiles.

KEEP INFORMED

- Look for other Good Idea Leaflets that could help you with your current project.
- Check that your Good Idea
 Leaflets are kept up to date.
 Leaflets are regularly changed
 to reflect product changes so
 keep an eye on issue dates.
- If you would like to be put on our mailing list for the Wickes booklet, call our Freephone number which is:

0500 300 328

 Visit our website at www.wickes.co.uk When you have a total for the whole room add on a further 10%. There are two reasons for this, the first being that inevitably some breakages will occur, and the second that if, in the future, tiles are damaged you will have replacements available.

Purchase all your tile requirements at the same time to avoid colour variation which may occur in different batches from the manufacturer. It is also worth 'shuffling' the tiles you purchase to again ensure that colour variations are spread over the entire wall area and are not laid in noticeable blocks.

NOTE: that no claims for colour variations can be considered after the tiles have been fixed.

If the wall tiles you choose do not have built in spacer lugs or are not of the universal type with chamfered edges, which act as spaces, then you should also purchase proper tile spacers. These plastic spacers are of uniform size and are far better than matches at achieving regular spacing between tiles.

FLOOR TILES

Ceramic floor tiles, quarry, terracotta, marble and slate are also available in a variety of styles, so again, you'll need to look around to find the ones which suit you.

Sizes are generally from 20cm square upwards to 45cm square. Floor tiles are thicker than wall tiles and some can be used indoors or outside. Look out for guidance on the packaging which indicates suitable areas for their use. Others are suitable for use on worktops as well as the floor. These are strong enough to resist harsh wear, impact, heat and cold. However, marble would not retain it's appearance for long if regularly used as a chopping board!

To work out the number of tiles you need for a floor, use the same method described previously for wall tiles, not forgetting to add on 10% for breakages and future repairs. Floor tiles are harder to cut than wall tiles and even the most experienced tiler will break one or two.

ADHESIVES & GROUTS

The long term success of your tiling depends to a large extent on the adhesives you use to bond the tiles to the surface behind, and you must select the correct adhesive for any particular situation.

For wall tiling work you need either a ready mixed standard wall tile adhesive or a water resistant variety. The standard and less expensive type is suitable for use in dry areas. It can cope with the occasional splashing or a little condensation so is generally satisfactory in a well ventilated kitchen or bathroom,

even around the bath or basin if the family tends not to saturate the walls.

Where condensation is a problem or in shower areas then our Water Resistant Wall Tile adhesive must be used. Since this is a slightly more expensive adhesive there is no reason why it should not be used in those frequently wet locations and the standard wall tile adhesive used in dryer parts of the same room. You do not have to stick to the same adhesive on all walls. If in doubt always go for the water resistant type.

Wickes All Purpose Tile Adhesive and Grout is designed as a product for both tile bonding and grouting.

For floor tiling work, exterior tiling, and tiling worktops an entirely different adhesive must be used and we offer a choice. Use our Rapid Set Floor Tile Adhesive where an excellent bond and quick setting is needed. The alternative is our Ceramic Floor Tile Adhesive. Supplied in powder form for mixing with water, this cement based adhesive is water resistant when dry and can even be used in swimming pools, which is what many kitchen floors seem to be like when the washing machine goes wrong, or elsewhere when the bath or basin overflows!

All ceramic tile adhesives have full usage instructions on their containers and these instructions should be closely followed.

The spaces between tiles are filled in with a grouting compound. For wall tiles purchase our ready mixed water resistant grout or our powdered water resistant grout which is ready for mixing with water. Where a water resistant tile adhesive has been used you must use a water resistant grout.

For floor tiling, the grout must be a water resistant one, specially formulated for flooring use. This is again cement based and available in grey, white or brown, in 5kg or 12.5kg containers. It is simply called Floor Tile Grout.

To find the right adhesive & grout for your tiling job, refer to the summary on the back page of this leaflet.

TILE CARE & MAINTENANCE

Wickes stocks a range of product for cleaning and maintaining your tiles. Details of these are listed here together with an easy to follow table on their uses on specific products.

INSTALLATION

Cement Grout Film Remover

Safely removes cement grout film.

Wickes Grout Film Remover is a concentrated, biodegradable, powerful but safe cleaner. Removes cement film, grout bloom residues from Wickes ceramic and terracotta tiles. It will not damage the grout or harm the tiles. It can be used to neutralise efflorescence, white salt stains from brick, flags or terracotta tiles and remove rust and oxide stains from the surfaces such as chrome and stainless steel. It does not give off fumes.

DO NOT USE ON NATURAL STONE TILES SUCH AS MARBLE, or other acid sensitive materials.

Natural Stone Grout Film Remover

Removes cement grout film after initial installation.

Wickes Natural Stone Grout Film Remover is highly concentrated, waterbased, buffered alkaline cleaner. It removes cement film, rust stains and lime scale residues. Suitable for use on pure marble, granite, travertine, slate and other calcareous natural stone as well as man made materials containing marble such as terrazzo and composition tiles. Use Wickes Natural Stone Grout Film Remover as an alternative to conventional acid-based products on lime containing surfaces where an acidic product would cause damage.

PROTECTION

Tile Sealer Satin

Protects treated slate, quarry tiles and unglazed ceramic tiles.

Wickes Tile Sealer Satin is a sophisticated water based polish and sealer which provides a hard wearing protective sheen finish to unglazed tiles, such as Wickes quarry tiles or Wickes natural slate. Porous materials, such as slate, or other natural stone or brick must first be treated with Wickes Tile & Stone Stain Protector. Wickes Tile Sealer Satin provides a finish which resists dirt penetration and staining by liquids, ensuring ease of cleaning. The sheen finish enhances natural colours without darkening. It has a non-slippery finish.

Natural Stone Gloss Finish

Protects and shines marble, limestone and natural floors.

Wickes Natural Stone Gloss Finish is a protective self-shining coat that provides a tough but removable finish which helps protect natural stone floors against staining, scratching and dulling caused by foot traffic. It also deepens the colour and texture and is effective against damage from acidic substances which can attack marble or other calcareous natural stone. Particularly recommended for treading internal polished floor surfaces such as Wickes marble tiles or as a gloss seal for Wickes natural slate.

TILE & STONE STAIN PROTECTOR

Protects porous natural stones and tiles.

Wickes Tile & Stone Stain Protector is a solvent based 'undercoat' sealer. For interior and exterior use. Dust proofs and reduces the water absorption of porous surfaces such as Wickes marble and natural slate. Helps to protect against staining and deep stubborn marking by forming a matt internal seal that does not contain silicones and allows surfaces to 'breathe'. Enhances colour and makes cleaning considerably easier. For additional surface protection on porous floor tiles, particularly those in the kitchen or hallway, Wickes Tile Sealer Satin (slate, quarry tiles etc.) or Wickes Natural Stone Gloss Finish (marble tiles) should also be applied.

CLEANING & AFTERCARE Natural Stone Wash & Shine

Cleans and protects marble, granite and other natural stones.

Wickes Natural Stone & Wash Shine is a highly concentrated, biodegradable, water based alkaline cleaner. Effectively cleans, enhances and protects all pure marble, granite, travertine and other calcareous natural stone as well as man made materials containing marble such as terrazzo and composition tiles. Suitable for use on all types of finish; polished, honed, flamed, riven etc. Particularly recommended for maintaining floors that have been treated with Wickes Natural Stone Gloss Finish, as the product not only cleans but also feeds and extends the life of the finish.

Floor Tile Clean & Shine

Cleans and protects all in one go.

Wickes Floor Tile Clean & Shine is a highly concentrated buffered cleaner containing special shine compounds and perfumes. Effectively cleans and protects all Ceramic floor tiles, glazed and unglazed, Terrazzo, Marble, natural stone and Slate. Particularly recommended for regular maintenance cleaning of floors treated with Wickes Tile Sealer Satin.

RENOVATION

Tile & Natural Stone Renovator

High performance renovator for problem stains and old polish.

Wickes Tile & Natural Stone Renovator isa highly concentrated powerful cleaner that is biodegradable and environmentally safe. This product will remove old layers of wax and polishes, such as Wickes Tile Sealer Satin and Wickes Natural Stone Gloss Finish. Ingrained dirt that has built up over time, most oil and grease marks and other stubborn stains can be scrubbed away. The ideal spring cleaner to revive unglazed floor tiles, Wickes quarry tiles,

Wickes Natural slate and marble tiles, allowing a new fresh Satin or Gloss coating to be applied.

PROJECT SHOPPING LIST

CALCULATING WALL TILE REQUIREMENTS

An example of calculating tile requirement follows, given a wall measuring 2.7 metres long by 2.2 metres high, to be tiled using 15cm x 15cm mixed plain and patterned tiles but no borders.

Divide wall height by tile height. 220cm / 15cm = 14.67, say 15. Divide wall length by tile width. 270cm / 15cm = 18 Tiles required: 15 x 18 = 270 Add 10% for breakages = 297 total.

15cm square tiles are usually packed in boxes of 43, so 297 / 43 = 6.9, say 7 boxes. To use a mix of tiles purchase, for example, 5 boxes of plain and 2 patterned. Matching borders if needed are 7.5cm high by 15cm wide and are available usually in packs of 10 or 12.

SPECIAL TOOLS REQUIRED

You will further require Wall Tile Adhesive plus grout. Packs have coverage stated on them.

You must have a plumb bob and line, a tile cutter and a tile saw for cutting to fit around door and window surrounds.

BEFORE YOU START

Tiles can be bonded to virtually any surface, including old tiles so long as those surfaces are dry, clean, in sound condition and properly prepared.

Important: All tiles must be adhered to a sound surface, which is strong enough to support their weight.

Plasterboard must be fully and correctly fixed to the substrate as per manufactures guidance.

Cement backing boards, such as Wickes Aquapanel, must be fixed as per the manufactures instructions.

Maximum Wall Tile Weights

Tiles weighing in excess of 20kg/m² – this is a combined weight and must include the weight of the adhesive and grout - should not be used on plastered or rendered walls.

For tile weights of between 20 & 32kg/ m², we recommend either:

- 1. Cutting back the plaster/rendering to sound solid wall.
- 2. Using fully adhered and sound plasterboard (without a plaster skim).
- 3. Using, correctly fixed, Wickes Aquapanel, cement-backing board.

Why?

The quality of adhesion between plaster and the substrate cannot be guaranteed, making this the weakest part of the wall. Too much weight, and at sometime, it will fall off.

For tile weights below 20kg/m², you can tile onto plaster but the plaster and substrate must be in good condition. If in any doubt, cut back and start again. If you are still not sure, seek professional advice.

Wall Preparation

Thoroughly clean the walls to remove all traces of dirt, grease, soapy deposits, etc. Make good major defects like loose plaster. Remove any old wallpaper. If the walls are gloss painted they should be well sanded down to provide a good key for the adhesive. Ensure that old emulsion paint is not peeling away from the walls. If it is then it should be removed to leave a sound secure base for the adhesive.

New plaster should not be tiled over until it is completely dry and this can take up to three months in some instances. Old tiles do not have to be removed. So long as they are still securely attached to the wall, they need only be cleaned. Any loose tiles should be stuck back into place.

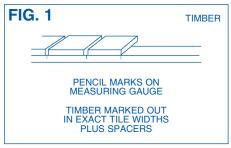
Make sure the wall is dry. If there is a damp problem this must be cured before any tiling is done.

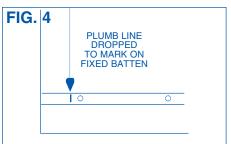
Absorbent surfaces such as new or bare plaster, timber, ply, blockboard or chipboard must be primed with our PVA Building Adhesive diluted 1 part adhesive to 5 parts water. This priming prevents the moisture in the tile adhesive being absorbed too quickly by the wall, and provides a much better key for the adhesive. Commence tiling only when the primer/sealer is dry.

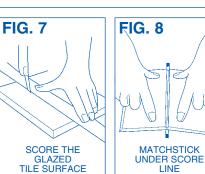
Floor Preparation

Concrete floors must be clean and dry. There should be a damp proof membrane below the surface to prevent rising damp. Since the floor tile adhesive can be applied as a thin bed or a thick bed, the floor does not have to be perfectly level, although this is preferable. If the concrete is very uneven or it is damaged use our floor levelling compound to make it level.

Suspended wooden floors can be successfully tiled but you must be sure that they are sufficiently strong to carry the very considerable extra weight of tiles, that they are rigid and that the area below the floorboards is well ventilated. If the floor is weak and shows any sign of movement you must strengthen it. Use a sheet material such as our exterior grade plywood building up to a minimum 18mm thick covering screwing







it into place at no more than 200mm centres. It is absolutely essential that a suspended timber floor is made 100% rigid. Any movement will first cause the grout to break up allowing moisture ingress and, subsequently, the tiles will break or lift.

'Loose' floor coverings such as vinyl sheeting should be completely removed. Any covering like old ceramic tiles must be thoroughly scrubbed clean and all traces of old polish removed.

WORK SEQUENCE

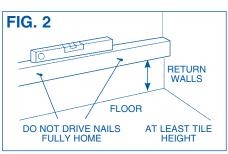
Bare wood or ply covered floors should be primed with Floor Tile Primer before tiling commences. Usage instructions are on the container.

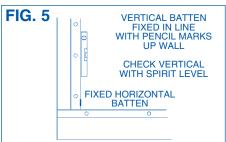
WALL TILING

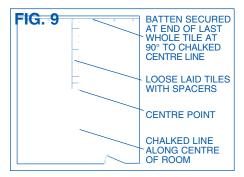
- 1. Make a measuring gauge.
- 2. Determine a starting point for tiling.
- 3. Commence tiling.
- 4. Cutting tiles.
- 5. Grouting.

1. MAKE A MEASURING GAUGE

Start by making yourself a measuring gauge. This is simply a length of 18mm x 44mm PSE timber about 1.8 or 2.4 metres long marked out in exact tile widths including spacers between. You will be able to use this gauge to determine where lines of tiles start and finish and will be able to avoid difficult cutting. **FIG. 1**.







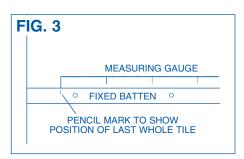
2. DETERMINE A STARTING POINT FOR TILING

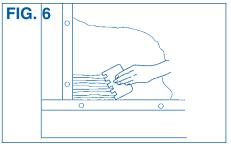
Fix a perfectly straight length of timber to the wall horizontally with the top edge just over one tile height above the highest floor or skirting board level. Use a spirit level to check that the batten is truly horizontal. This batten going the full width of the wall will provide the level at which tiling commences and will ensure that tiling lines are straight even though the floor may be uneven. Don't drive the masonry nails fully home. They have to be removed later. See **FIG. 2**.

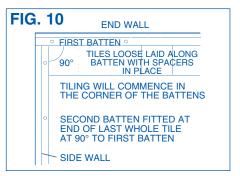
Use your measuring gauge vertically from the fixed batten to check that at the top of the wall you are not left with a narrow strip to be tiled..Narrow tile strips are difficult to cut..If this situation arises then drop the horizontal fixed batten to leave roughly equal spacing at the top and bottom of the wall for cut tiles.

By measurement, find the centre point of the fixed batten (the centre point along the width of the wall)..Mark this point on the batten. Use your measuring gauge horizontally along the batten to determine where the last whole tile will be fixed close to the end of the wall. Mark this point on the fixed batten. See **FIG. 3**.

Drop a plumb line down the wall so that the string touches the last mark on the horizontal batten. **FIG. 4**. Make several pencil marks on the wall behind the string line then fix another straight batten vertically to the wall along the







marks. **FIG. 5**. Check that the batten is truly vertical with a spirit level. Loose lay a few tiles into the corner formed by the battens to check that they sit squarely.

3. TILING

Tiling commences in the corner..
Follow the instructions supplied with the adhesive, spreading this over an area of about one square metre at a time then comb it out. **FIG. 6**. Place the tiles firmly onto the ribbed adhesive with spacers set in between.

Working sideways and upwards complete the fixing of all whole tiles then leave for about 24 hours to dry.

Remove the battens carefully then cut tiles to fit around the perimeter..Where space is limited the adhesive can be applied to the back of the cut tiles instead of onto the wall.

4. CUTTING WALL TILES

The simplest method of doing this is to mark the glazed tile surface, where it is to be cut, then, with the help of a straight edge, score the surface with the tile cutter to break the glaze. **FIG. 7**.

Place the scored tile over a couple of matchsticks, then press down gently either side to snap the tile. **FIG. 8**.

Pincers, pliers or a tile saw can be used to cut corners or curves out of tiles to fit around projections. Again the surface should be scored before the waste area is nibbled away.

5. GROUTING

When all tiling is complete and has dried for about 24 hours, the spaces between them should be filled with grouting compound.

FINISHING OFF

Joins between tiles and horizontal surfaces such as baths, basins, sinks, worktops etc., should be sealed with our silicone sealant to prevent moisture penetrating behind such fixtures.

FLOOR TILING

Tiling commences in the corner of the room furthest from the door but as with wall tiling you cannot rely upon existing wall corners to be square or walls to be straight so again battening must be used to provide the starting point.

Using a measure and a chalked string line mark the centre line of the room from the door end to the far end. Find and mark the centre of this line.

Loose lay tiles complete with spacers from the centre point alongside the line to the far wall. Fix a straight batten to the floor at 90° to the line of tiles where the edge of the last whole tile is. **FIG. 9**.

Loose lay further tiles towards the corner of the room and fix another batten at 90° to the first alongside the last whole tile. FIG. 10. Check that the corner produced is exactly square, and that the positioning of neither line of tiles will result in narrow tiles having to be cut to fill in around the perimeter once the battening has been removed. Tiling commences on the prepared corner following the instructions on the adhesive container. Any inward opening door will have to be removed and reduced in height to open again over the tiles. A heavy duty floor tile cutter will be needed to cut ceramic tiles to fit around the perimeter once all whole tiles are laid and the adhesive has set.

Important:

- An adhesive setting time is quoted for ideal conditions and is only a guide. Where temperatures are low, air is damp, ventilation is poor, the substrate is not fully dry (new concrete/screed takes about 1 week per 2.5cm (1") of thickness to dry), the substrate is sealed/non porous, excessive adhesive or thick tiles are used, setting times will be increased, sometime greatly. Note: If a surface primmer is needed, only use PVA diluted 1:5 with water
- A hired diamond tipped wet cutter will be needed for terracotta, granite, marble and slate tiles.
- Grouting is only done after all tiling is complete.
- Tiles are non-absorbent and may become slippery when wet; therefore, you should take suitable precautions.

WICKES TILE TREATMENT SYSTEM

TREATMENT	GLAZED CERAMIC	QUARRY	FURTHER INFORMATION
INSTALLATION	WICKES GROUT FILM REMOVER	WICKES GROUT FILM REMOVER	In order that the surface protection can achieve a good standard it is vital that all grout and surface cementicious residues are removed.
PROTECTION		WICKES TILE SEALER SATIN	Enhances colour and helps protect against stains, stubborn marks and scratches.
CLEANING & AFTERCARE	WICKES FLOOR TILES CLEAN & SHINE	WICKES FLOOR TILES CLEAN & SHINE	Cleans, shines and protects, for regular maintenance and cleaning. Fresh and scented wash ideal for glazed tiles.
RENOVATION	WICKES TILE & NATURAL STONE RENOVATOR	WICKES TILE & NATURAL STONE RENOVATOR	Strong cleaning product for remnants of old polish, wax, or real problem stains. Ideal for periodic floor renovation.
MAINTENANCE	and the sweeping up of loose of finish 1:100 with water and wa	surface coatings is highly resistadirt will prolong the life of the seashing over from time to time will and destroy the surface of the floo	I. Diluting the appropriate nelp to repair worn areas.

GOLDEN RULES

- Do not try to seal or polish wet tiles. Porous tiles absorb water: This must dry out and the more porous the material, the more days this will take
- Do not seal or polish dirty floors. Sealing does not hide dirty marks
- Avoid allowing foam or bubbles to spoil the finish
- Always read the bottle labels and information sheets.
 Always pre-test on a small, inconspicuous area
- The body seal protection must fully absorb into the surface. Do not over apply and allow to film on the surface; use an absorbent cloth, dampened with a little white spirit if necessary to remove any surplus while still wet
- Always seal floors previously sealed with linseed oil with a wax rather than the water based system recommended here
- Further information is available on the individual product labels

TILE ADHESIVE SELECTOR

Find the right Adhesive and Grout for your tiling job.

Product	Wickes Tile Ceramic Adhesive	Wickes Rapid Set Tile Adhesive	Wickes Flexible Rapid Set Tile Adhesive	Wickes White Block Mortar	Wickes Non-Slip Wall Tile Adhesive	Wickes Waterproof Wall Tile Adhesive	Wickes Extra Strong Wall Tile Adhesive
Technical Information							
Formulation	Cement-based	Cement-based	Cement-based	Cement-based	Ready-mixed	Ready-mixed	Ready-mixed
Approx. Coverage	3-4.5kg/m ²	3-4.5kg/m ²	3-4.5kg/m ²	0.5kg/block	1.2m ² /L	1.2m ² /L	1.1m ² /L
Setting/Drying Time*	24 hours	2 hours	2 hours	24 hours	24 hours	24 hours	24 hours
Colour	Grey	Grey	White	White	Grey	Grey	Grey
Large Tiles			V				V
Waterproof	V	V	V	V		V	V
Where are you tiling?							
Kitchen/Bathroom	V	V	~	V	V	V	V
Shower	V	V	V	V		V	V
Wall	V	V	V	V	V	V	V
Floor	V	~	V				
Exterior	V	V	V				
What tiles are you using?							
Ceramic	V	V	V		V	V	V
Quarry & Mosaic	V	V	V				V
Natural Stone			V				V
Porcelain			V				
Glass Blocks				V			
What is the substrate made from?							
Solid subtrates: e.g. Concrete, cement/sand render or screed, primed plaster or plasterboard etc.	V	V	v	V	V	V	V
Flexible Subtrates: e.g. WBP Plywood and/or underfloor heating	✓ +A	√ +A	~			V	V

TILE GROUT SELECTOR

Product	Wickes All Purpose Tile & Grout	Wickes Floor & Wall Tile Grout	Wickes Waterproof Wall Tile Grout	Wickes Powdered Wall Tile Grout	Wickes Grout Whitener
Technical Information					
Formulation	Ready-mixed	Cement-based	Ready-mixed	Cement-based	Ready-mixed
Approx. Coverage	1.08m ² /L	1.2m ² /kg	1kg/320 tiles	3.3m ² /kg	125ml/14m ²
Setting Time /Drying time*	4-8 hours	24 hours	24 hours	2 hours	12-24 hours
Maximum Joint Width	3mm	10mm	12mm	12mm	N/A
Colour	White	5 Colours	White & Beige	White	White
Large Tiles	V	V	V	V	V
Waterproof	V	V	V	V	V
Where are you grouting?					
Kitchen/Bathroom	V	V	V	V	V
Shower	V	V	V	V	
Wall	V	V	V	V	V
Floor		V			V
Exterior		V			
What is the substrate made from?					
Solid subtrates: e.g. Concrete, cement/sand render or screed, primed plaster or plasterboard etc.	V	v	V	V	v
Flexible Subtrates: e.g. WBP Plywood and/or underfloor heating		V	V		V

⁺A = Includes Wickes Floor Tile Primer and Admixture in adhesive mix for added flexibility. *All setting and drying times are approximate.

Whilst every care has been taken to ensure that the product design, descriptions, specifications and techniques of constructing the products are accurate at the date of printing. Wickes products will inevitably change from time to time and the customer is advised to check that the design, descriptions, specifications and techniques of constructing any of the products described in this leaflet are still valid at the time of purchase or placing an order.

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